# Twelve-Month Rolling Average Price of Compliance Years 2008 and 2009 NOx RTCs

Report to Stationary Source Committee October 2009

### **Summary**

The twelve-month rolling average prices of Compliance Years 2008 and 2009 NOx RTCs since January 2008 have been on a declining trend and have not exceeded the \$15,000 per ton threshold. The September 2008 through August 2009 twelve-month rolling average price for credits valid for Compliance Year 2008 is \$1,195 per ton. This twelve-month rolling average price reflects a significant reduction in the price of Compliance Year 2008 RTCs over time, from a high of \$12,144 per ton during calendar year 2008. In addition, the twelvemonth rolling average price for credits valid for Compliance Year 2009 RTCs during October 2008 through September 2009 is \$6,378. Furthermore, the October 2008 through September 2009 average price of Compliance Year 2009 RTCs is \$6,378 per ton. In comparison, the twelve-month rolling average price of Compliance Year 2008 RTCs was \$4,953 per ton for the corresponding period in 2007-2008, which is the appropriate basis for comparison because RTCs prices generally decline as the expiration date approaches. This comparison (\$6,378 per ton vs. \$4,953 tons/year for 2008 RTCs) shows that the average price for Compliance Year 2009 RTCs is higher that was the price for 2008 RTCs during the corresponding period. However, the twelve-month rolling average prices are well below the \$15,000 per ton threshold specified by Rule 2002(f)(1)(C) and, therefore, do not trigger the requirement of reporting to and potential further actions by the Governing Board.

#### **Background**

The Governing Board amended Rule 2002(f) in January 2005 to reduce Compliance Year 2007 and beyond NOx RTC holdings by 22.5 % over five years (11.7 % in 2007 and an additional 2.7 % in each of the years 2008 through 2011), to convert the 10.8 % adjustment applied over the years 2008 through 2011 to Non-Tradable/Non-Usable RTCs, and to issue them to the parties that held the RTCs prior to conversion. These amendments further direct the Executive Officer to calculate the twelve-month rolling average price of NOx RTCs ("rolling average price") "for all trades for the current compliance year" excluding "RTC transactions reported at no price." Furthermore, pursuant to the RTC price reporting and averaging methodology approved by the Governing Board in September 2007, "swap" transactions (the exchange of RTCs for other RTCs or for other emissions credits) are also excluded from the calculation of

rolling average prices. In the event that this rolling average price exceeds \$15,000 per ton, the Executive Officer will report the rolling average price to the Governing Board. If the Governing Board concurs with the Executive Officer and determines that the rolling average price exceeds \$15,000 per ton it may direct the Executive Officer to convert the annual incremental Non-Tradable/Non-Usable RTCs (2.7 %) back to active, tradable RTCs valid for the compliance year in which Cycle 1 facilities are operating at the time the finding is made. In its resolution amending Rule 2002(f), the Governing Board directed the Executive Officer to report the NOx RTC twelve-month rolling average price data to the Stationary Source Committee at least quarterly. Therefore, staff began reporting twelve-month rolling average prices of Compliance Year 2008 NOx RTCs to the Stationary Source Committee in January 2008. Starting with the January 2009 report, the twelve-month rolling average price of 2009 NOx RTCs is also included. Cycle 2 of Compliance Year 2008 ended June 30, 2009. RECLAIM allows continued trade of RTCs during the 60-day annual reconciliation period following the end of a compliance year. This reconciliation period ended on August 29, 2009. Therefore, this report is the last time for reporting Compliance Year 2008 RTC prices.

## **Analysis and Conclusions**

Figure I presents the monthly average cost of Compliance Year 2008 NOx RTCs for each month from January 2007 through August 2009, as well as the total volume of Compliance Year 2008 NOx RTCs traded in each of those months. Similarly, Figure II shows the monthly average cost and volume of Compliance Year 2009 NOx RTCs traded. The rolling average price can be calculated by dividing the total value traded during the twelve-month period by the total volume traded for the same period. Tables I and II list the monthly total volume, total value traded and the rolling average price data for Compliance Year 2008 and 2009 NOx RTCs, respectively. The rolling average price data will be updated on a monthly basis and reported to the Stationary Source Committee on a quarterly basis.

Historically, trading of a particular RTC is most active during the reconciliation period following its expiration date when facilities perform their final emission reconciliation. As shown in Figure I, this trend is repeated for Cycle 1 2008 NOx RTC during January and February 2009, the annual reconciliation period for Cycle 1 facilities. During this sixty-day period, the trading volume is dramatically higher when compared to the other months. Prices for these credits also dropped as the end of the reconciliation period approached because these credits can no longer be traded beyond this period. This same trend is repeated for Cycle 2 2008 NOx RTCs during July and August 2009, when there is an increase in volume and a pronounced drop in prices.

As shown in Tables I and II, the monthly rolling average prices since January 2008 have not exceeded the \$15,000 per ton threshold specified in Rule 2002(f). The rolling average price of Compliance Year 2008 NOx RTCs have been on a declining trend. The price for such RTCs averaged over September 2008 through August 2009 is \$1,195 per ton. In comparison, the average price of

Compliance Year 2008 RTCs was \$8,715 per ton for the corresponding period in 2007-2008. The average price for these RTCs was at a high of \$12,144 per ton at the beginning of the compliance year. For Compliance Year 2009 NOx RTCs, the average price over October 2008 through September 2009 is \$6,378. RTC prices generally decline as the expiration date approaches. Therefore, the appropriate comparison of the October 2008 through September 2009 average price of Compliance Year 2009 RTCs is to the October 2007 through September 2008 average price of Compliance Year 2008 RTCs. This comparison (\$6,378 per ton vs \$4,953 tons/year for 2008 RTCs) shows a higher price for 2009 NOx RTCs than for 2008 NOx RTCs during the corresponding period. Based on these average prices, it is not necessary for the Executive Officer to report the rolling average price to the Governing Board or for the Governing Board to consider reinstating the incremental NOx RTC adjustment for Compliance Years 2008 or 2009.

Figure I

Monthly Average Cost Data for Compliance Year 2008 NOx RTCs Traded –
January 2007 through September 2009

# Compliance Year 2008 NOx RTC Monthly Average Cost (January 2007 through September 2009)

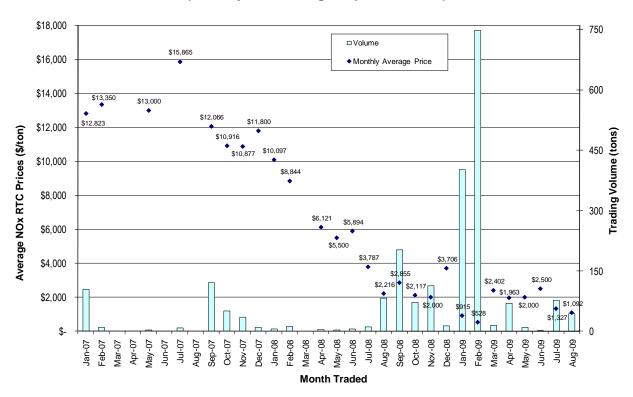


Table I

Twelve-Month Rolling Average Price Data for Compliance Year 2008 NOx RTCs

Twelve-Month Rolling Average Price Data for Compliance Year 2008 NOx RTC (January 2007 - September 2009)						
Reporting Month	12-Month Period	Total Volume Traded with Price During Past 12-month (Tons)	Total Value Traded During Past 12- month	Average Price (\$/ton)		
Jan-08	Jan 07 - Dec 07	342.9	\$4,164,364	\$12,144		
Feb-08	Feb 07 - Jan 08	243.7	\$2,877,948	\$11,809		
Mar-08	Mar 07 - Feb 08	246.2	\$2,854,855	\$11,596		
Apr-08	Apr 07 - Mar 08	246.2	\$2,854,855	\$11,596		
May-08	May 07 - Apr 08	250.9	\$2,883,930	\$11,492		
Jun-08	June 07 - May 08	249.9	\$2,850,305	\$11,404		
Jul-08	July 07 - June 08	255.4	\$2,882,425	\$11,286		
Aug-08	Aug 07 - July 08	257.8	\$2,784,042	\$10,799		
Sep-08	Sep 07 - Aug 08	340.5	\$2,967,329	\$8,715		
Oct-08	Oct 07 - Sep 08	422.4	\$2,092,136	\$4,953		
Nov-08	Nov 07 - Oct 08	443.9	\$1,691,885	\$3,811		
Dec-08	Dec 07 - Nov 08	521.9	\$1,537,235	\$2,945		
Jan-09	Jan 08 - Dec 08	525.3	\$1,470,639	\$2,800		
Feb-09	Feb 08 - Jan 09	921.8	\$1,785,394	\$1,937		
Mar-09	Mar 08 - Feb 09	1657.2	\$2,069,642	\$1,249		
Apr-09	Apr 08 - Mar 09	1672.2	\$2,105,667	\$1,259		
May-09	May 08 - Apr 09	1736.4	\$2,211,979	\$1,274		
Jun-09	June 08 - May 09	1742.7	\$2,214,854	\$1,271		
Jul-09	July 08 - June 09	1738.2	\$2,185,234	\$1,257		
Aug-09	Aug 08 - July 09	1804.3	\$2,245,124	\$1,244		
Sep-09	Sep 08 - Aug 09	1765.6	\$2,109,837	\$1,195		
Oct-09	Oct 08 - Sep 09	Compliance Year 2008 RTC can no longer be traded after August 2009				

Monthly Average Cost Data for Compliance Year 2009 NOx RTCs Traded – January 2008 through September 2009

Figure II

## Compliance Year 2009 NOx RTC Monthly Average Cost (January 2008 through September 2009)

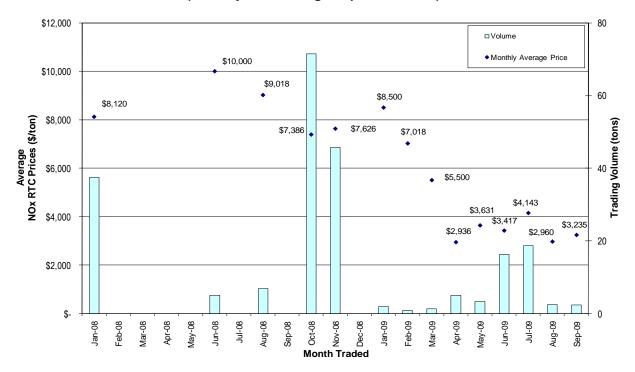


Table II

Twelve-Month Rolling Average Price Data for Compliance Year 2009 NOx RTCs

Twelve-Month Rolling Average Price Data for Compliance Year 2009 NOx RTC (January 2008 - September 2009)						
Reportin g Month	12-Month Period	Total Volume Traded with Price During Past 12-month (tons)	Total Value Traded During Past 12- month	Average Price (\$/ton)		
Jan-09	Jan 08 - Dec 08	166.5	\$1,292,806	\$7,763		
Feb-09	Feb 08 - Jan 09	131.1	\$1,005,570	\$7,672		
Mar-09	Mar 08 - Feb 09	131.9	\$1,011,742	\$7,668		
Apr-09	Apr 08 - Mar 09	133.3	\$1,019,167	\$7,646		
May-09	May 08 - Apr 09	138.4	\$1,034,053	\$7,473		
Jun-09	June 08 - May 09	141.6	\$1,045,853	\$7,385		
Jul-09	July 08 - June 09	152.9	\$1,051,548	\$6,877		
Aug-09	Aug 08 - July 09	171.6	\$1,128,813	\$6,580		
Sep-09	Sep 08 - Aug 09	167.2	\$1,074,304	\$6,424		
Oct-09	Oct 08 - Sep 09	169.7	\$1,082,149	\$6,378		